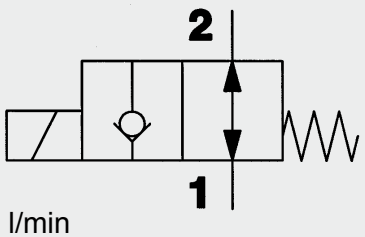
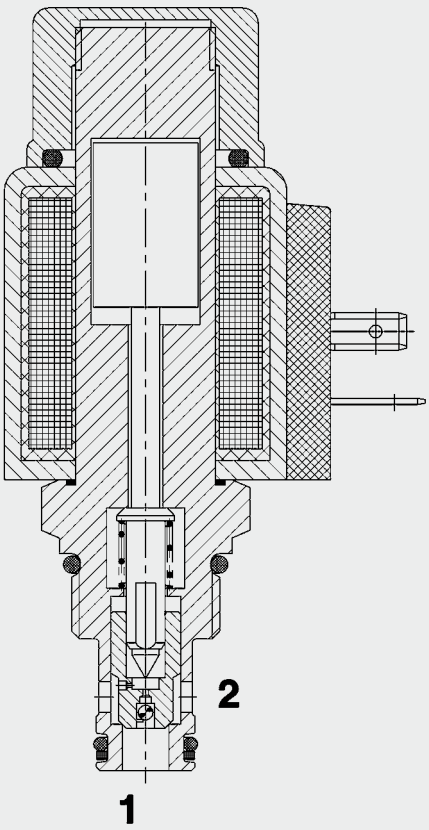


38 l/min
350 bar

2/2 Solenoid Directional Valve UNF Poppet Type, Pilot-Operated Normally Open (Reverse Flow) SAE-08 Cartridge – 350 bar

WS08YR-01

FUNCTION



When the solenoid coil is not energized, the valve is open in both directions.

When the solenoid coil is energized, the valve is closed from port 2 to port 1. In the reverse direction from port 1 to 2 there is free flow through the valve when the pressure force on the piston exceeds the solenoid force (approx. 9 to 20 bar).

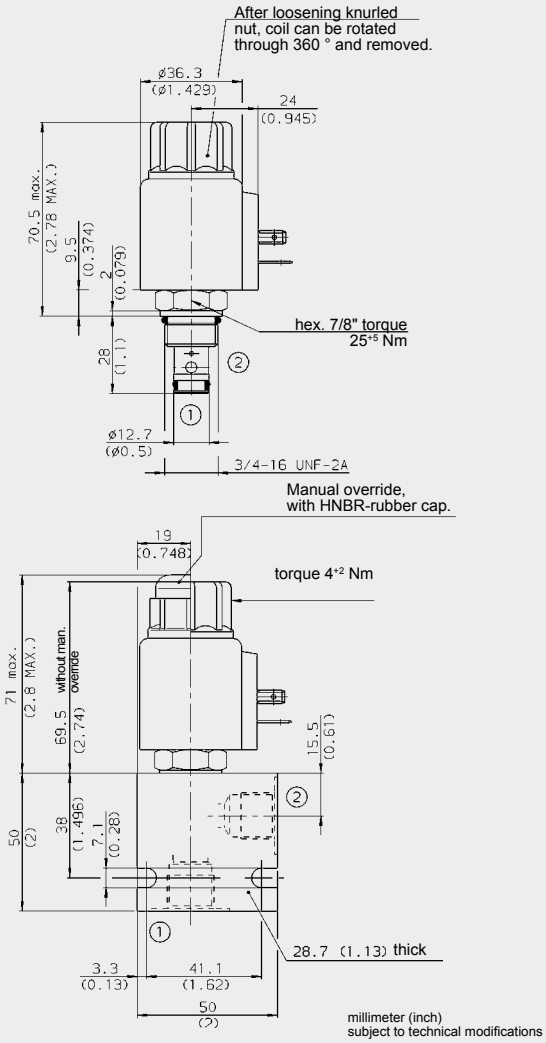
FEATURES

- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Coil seals protect the solenoid system
- Wide variety of connectors available
- Excellent switching performance by high power HYDAC solenoid
- Low pressure drop due to CFD optimized flow path

SPECIFICATIONS

Operating pressure:	max. 350 bar	
Nominal flow:	max. 38 l/min	
Leakage:	leakage-free (max. 5 drops ≙ 0,25 cm³/min at 350 bar)	
Media operating temperature range:	min. -20 °C to max. +100 °C	
Ambient temp. range:	min. -20 °C to max. +60 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2	
Viscosity range:	min. 7.4 mm²/s to max. 420 mm²/s	
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner	
$MTTF_d$:	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Installation:	No orientation restrictions	
Materials:	Valve body:	free-cutting steel
	Piston:	hardened and ground steel
	Seals:	NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)
	Back-up rings:	PTFE
	Coil:	Steel/Polyamide
Cavity:	FC08-2	
Weight:	Valve complete	0.33 kg
	Coil only	0.19 kg
Electrical data:		
Switching time:	Energized:	approx. 50 ms
	De-energized:	approx. 35 ms
Type of voltage:	DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil	
Current draw at 20 °C:	1.5 A at 12 V DC 0.8 A at 24 V DC	
Voltage tolerance:	± 15% of the nominal voltage	
Coil duty rating:	Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature	
Coil type:	Coil…-40-1836	

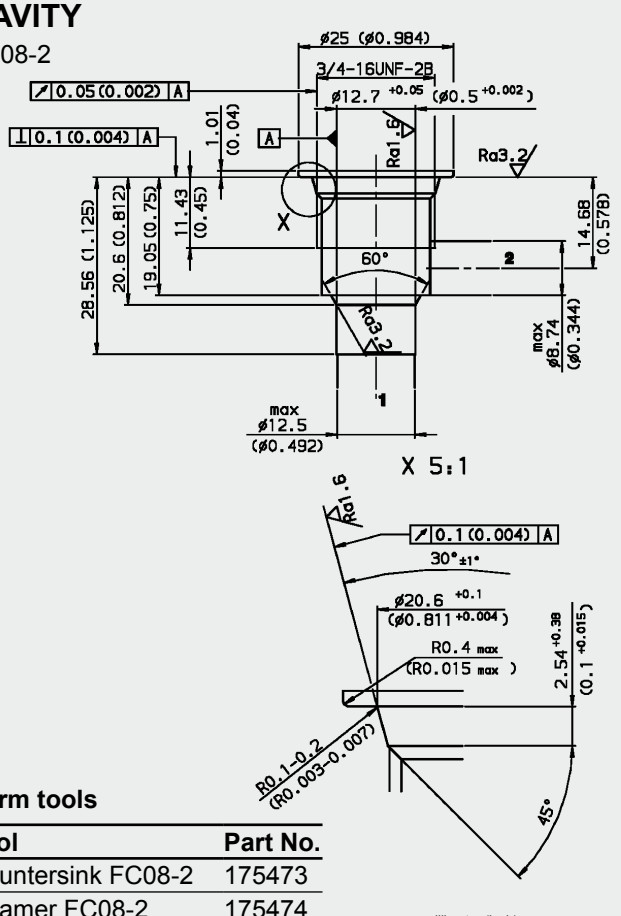
DIMENSIONS



millimeter (inch)
subject to technical modifications

CAVITY

FC08-2



millimeter (inch)
subject to technical modifications

Form tools

Tool	Part No.
Countersink FC08-2	175473
Reamer FC08-2	175474

MODEL CODE

WS08YR – 01 M – C – N – 24 DG

Basic Model
Directional poppet valve UNF

Type
01 = standard

Manual override
No details = without manual override
M = manual override

Body and Ports*
C = Cartridge only
SB3 = G3/8 BSP ports, steel body
AB3 = G3/8 BSP ports, aluminium body

Seals
N = NBR
V = FKM

Coil voltage
DC voltages:
12 = 12 V DC
24 = 24 V DC
AC voltages (bridge rectifier built into the coil)
115 = 115 V AC
230 = 230 V AC
Other voltages on request

Coil connectors (type 40-1836)
DC: DG = DIN connector to EN 175301-803
DK = KOSTAL threaded connection M27x1
DL = 2 flying leads, 457 mm long, 0.75 mm²
DN = Deutsch connector, 2-pole, axial
DT = AMP Junior Timer, 2-pole, radial
AC: AG = DIN connector to EN 175301-803
Other connectors on request

Standard models

Model code	Part No.
WS08YR-01-C-N-24DG	562805
WS08YR-01-C-N-230AG	3043387

Other models on request

* Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH082-SB3	560919	Steel, zinc-plated	G3/8	350 bar
FH082-AB3	3011423	Aluminium, clear anodized	G3/8	210 bar

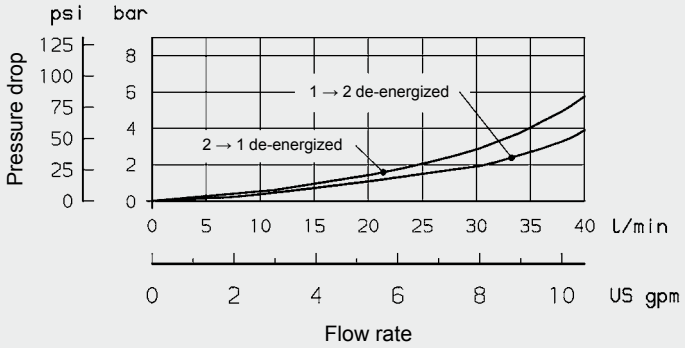
Other housings on request

Seal kits

Code	Material	Part No.
FH082-N SEAL KIT	NBR	3033920
FH082-V SEAL KIT	FKM	3051756

PERFORMANCE

Measured at ν = 34 mm²/s, T_{oil} = 46 °C



NOTE

The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

HYDAC Fluidtechnik GmbH
Justus-von-Liebig-Str.
D-66280 Sulzbach/Saar
Tel: 0 68 97 /509-01
Fax: 0 68 97 /509-598
E-Mail: flutec@hydac.com